|  |  |  |  |
| --- | --- | --- | --- |
| **Criterion** | **D** | **DCP** | **CE** |
| Achievement level awarded | 6 |  |  |
| Achievement of aspects | c, c, c |  |  |

**Assessment**

**Design**

**Defining the problem and selecting variables**

**Complete**

The student states a clear question and identifies the relevant variables. The compounds are chosen with a meaningful purpose and it is pleasing to see a student consider the effect of molecular structure on a physical property.

**Controlling variables**

**Complete**

The student designs a method that manipulates the independent variable very effectively and adequately controls other variables. Although the maximum heating temperature is not a consistent level above the melting temperature and the student does not explicitly indicate if he takes phenyl benzoate and benzoic acid out of the water/oil bath after turning the Bunsen off there is enough evidence to support a complete.

**Developing a method for collection of data**

**Complete**

The student develops a method that allows for the collection of sufficient data. Four compounds are available and each one is to be tested twice.